

NEXT-GENERATION LEARNERS PROPOSED ACCOUNTABILITY MODEL

DRAFT FOR DISCUSSION

Revised based on input from Kentucky Board of Education, stakeholders and data simulations

The Kentucky Department of Education's mission is to prepare all Kentucky students for next-generation learning, work and citizenship by engaging schools, districts, families and communities through excellent leadership, service and support.

BACKGROUND

Education Commissioner Terry Holliday and staff in the Kentucky Department of Education (KDE) continue to discuss with the Kentucky Board of Education (KBE) and various stakeholder groups (i.e., School Curriculum, Assessment and Accountability Council (SCAAC), superintendents in educational cooperative meetings, District Assessment Coordinators, Kentucky Association for Assessment Coordinators, Education Coalition, Math Achievement Committee, Kentucky Association of School Councils Conference, Prichard Committee for Academic Excellence and Parents Advisory Council) the broad concepts proposed for a future state accountability model. Specifically, the broad categories of Achievement, Gap, Growth, Readiness and Graduation Rate are being introduced to solicit feedback from educators, stakeholders and the public.

On April 13, 2011, the Kentucky Board of Education approved, with suggested changes, the regulation (703 KAR 5:200) that defines Next-Generation Learners, the first component of Kentucky's new accountability system.

A BALANCED APPROACH

Senate Bill 1 (2009 Kentucky General Assembly) requires Kentucky to begin a new assessment and accountability system in the 2011-12 school year. The proposed assessment and accountability model is a balanced approach that incorporates all aspects of school and district work and is organized around the Kentucky Board of Education's four strategic priorities: next-generation learners, next-generation professionals, next-generation support systems and next-generation schools/districts. Achievement in reading, mathematics, science, social studies, writing and Program Reviews in arts/humanities, practical living/career studies and writing are the heart of the model.

The list below details the indicators that could be included in the future accountability model around each of these strategic priorities.

Unbridled Learning: College- and/or Career-Ready for All			
Next-Generation Learners	Next-Generation Instructional Programs and Support	Next-Generation Professionals	Next-Generation Schools/ Districts
Achievement (Proficiency) Gap Growth Readiness for College/Career Graduation Rate	Program Reviews	Percent Effective Teachers Percent Effective Leaders	Revised Report Card Proposed Overall Accountability Score (using data from the preceding columns)

NEXT-GENERATION LEARNERS PROPOSED ACCOUNTABILITY MODEL

DRAFT FOR DISCUSSION

Revised based on input from Kentucky Board of Education, stakeholders and data simulations

The following is an overview of the proposed accountability model for next-generation learners.

Calculation for School/District Point Total

- **Achievement** (Content Areas are reading, mathematics, science, social studies and writing.)
- **Gap** (percentage of proficient and distinguished) for the Non-Duplicated Gap Group for all five content areas
- **Growth** in reading and mathematics (percentage of students at typical or higher levels of growth)
- **College Readiness** as measured by the percentage of students meeting benchmarks in three content areas on EXPLORE at middle school
- **College/Career-Readiness Rate** as measured by ACT benchmarks, college placement tests and career measures
- **Graduation Rate**

KBE asked that, within each classification, an indicator be added to show the direction in which the performance of the school/district is moving.

SCHOOL AND DISTRICT CLASSIFICATIONS

Distinguished	<u>Cut score (to be determined)</u> points or more in Elementary: Achievement + Gap + Growth Middle: Achievement + Gap + Growth + College Readiness High: Achievement + Gap + Growth+ College/Career Readiness Rate + Graduation Rate
Proficient	<u>Cut score (to be determined)</u> points in Elementary: Achievement + Gap + Growth Middle: Achievement + Gap + Growth + College Readiness High: Achievement + Gap + Growth+ College/Career Readiness Rate + Graduation Rate
Needs Improvement	<u>Cut score (to be determined)</u> points in Elementary: Achievement + Gap + Growth Middle: Achievement + Gap + Growth + College Readiness High: Achievement + Gap + Growth+ College/Career Readiness Rate + Graduation Rate
Persistently Low-Achieving	Fewer than <u>cut score (to be determined)</u> points in Elementary: Achievement + Gap + Growth Middle: Achievement + Gap + Growth + College Readiness High: Achievement + Gap + Growth+ College/Career Readiness Rate + Graduation Rate

NEXT-GENERATION LEARNERS PROPOSED ACCOUNTABILITY MODEL

DRAFT FOR DISCUSSION

Revised based on input from Kentucky Board of Education, stakeholders and data simulations

Performance Measures for Next-Generation Learners

(This model is based on student data from state-required assessments administered in grades 3-12.)

Grade Range	Achievement	Gap	Growth	College/Career Readiness	Graduation Rate
Elementary	Tests: reading, mathematics, science, social studies and writing	Tests: reading, mathematics, science, social studies and writing	Reading and Mathematics	N/A	N/A
Middle	Tests: reading, mathematics, science, social studies and writing	Tests: reading, mathematics, science, social studies and writing	Reading and Mathematics	EXPLORE (College Readiness)	N/A
High	End-of-Course Tests** and On-Demand Writing	End-of-Course Tests** and On-Demand Writing	PLAN to ACT <i>Reading and Mathematics</i>	College/Career-Readiness Rate	AFGR*/ Cohort Model

*AFGR is Averaged Freshman Graduation Rate.

** Four end-of-course exams are expected in 2012, the first year of the new system: English II, Algebra II, Biology and U.S. History. End-of-course test results may be used for a percentage of a student's final grade in the course, as outlined in local policy. If that percentage is less than 20 percent, school districts will submit reports to KDE providing justification.

Process

Individual student data collected from the assessments and rates listed in the chart above are used to generate a numeric value for each category of Next-Generation Learners — Achievement, Gap, Growth, College/Career Readiness and Graduation Rate. The value for each category is weighted to create a final overall score for Next-Generation Learners. The following table illustrates the weights.

Grade Range	Achievement	Gap	Growth	College/Career Readiness	Graduation Rate	Total
Elementary	30	30	40	N/A	N/A	100
Middle	28	28	28	16	N/A	100
High	20	20	20	20	20	100

A standard setting process will establish the cut scores to classify a school or district as Distinguished, Proficient, Needs Improvement or Persistently Low-Achieving (PLA). Cut scores are the numeric values where schools or districts enter or exit the classifications. Note: The PLA designation identifies the lowest five percent as required by federal and state statute and regulation.

NEXT-GENERATION LEARNERS PROPOSED ACCOUNTABILITY MODEL

DRAFT FOR DISCUSSION

Revised based on input from Kentucky Board of Education, stakeholders and data simulations

Proposed Achievement Calculation: For each content area, one point is awarded for each percent of students scoring proficient or distinguished. One-half point is awarded for each percent of students scoring apprentice. No points are awarded for novice students.

KBE directed that a bonus for distinguished be added that does not mask or overcompensate for novice performance. To calculate the bonus, each percent distinguished earns an additional one-half point, and the percent novice earns a negative one-half point, so that when the distinguished and novice values are combined, the novice points may offset the distinguished bonus. If the novice performance completely offsets the distinguished bonus, no points are added to or subtracted from the achievement calculation.

Proposed Gap Calculation: Kentucky's goal is 100 percent proficiency for all students. The distance from that goal or gap is measured by creating a student Gap Group — an aggregate count of student groups. Student groups combined include ethnicity/race (African American, Hispanic, Native American), Special Education, Poverty (free/reduced-price meals) and Limited English Proficiency that score at proficient or higher.

Non-duplicated Counts

To calculate the combined student Gap Group, **non-duplicated counts** of students who score proficient or higher and are in the student groups would be summed. This will yield a single gap number of proficient or higher students in the Student Gap Group, with no student counting more than one time, and all students in included groups being counted once. The following is an example of how non-duplicated counts work.

Student 1: Donatello— African American, Free/Reduced-Price Meals (SCORED PROFICIENT)

Student 2: Ricky—White, Free/Reduced Lunch, Special Education

Student 3: Enrique —Limited English Proficient, Free/Reduced-Price Meals

Student 4: Michelle – Free/Reduced Lunch (SCORED PROFICIENT)

Student 5: Marco – Limited English Proficient, Free/Reduced-Price Meals and Special Education

If the five students above were counted in each of the student groups to which they belong, there would be three proficient students and eight not-proficient students in the calculation. With the exception of Student 4: Michelle, this is a double or triple counting of each individual student. This counting method would yield 27 percent proficient. A non-duplicated count would show five total students with two (Donatello and Michelle) as proficient or higher and yield 40 percent proficient.

Non-duplicated Gap Group Performance Reported

The percent of students performing at proficient and distinguished in the Non-Duplicated Gap Group is reported annually. The “N” count (number of students reported) is based on total school population, not grade-by-grade enrollment, thus causing almost every school in Kentucky to have a focus on gap groups.

NEXT-GENERATION LEARNERS PROPOSED ACCOUNTABILITY MODEL

DRAFT FOR DISCUSSION

Revised based on input from Kentucky Board of Education, stakeholders and data simulations

While all individual groups will be disaggregated and reported, the Gap category of the accountability model will include only the percent of students in the combined Non-Duplicated Gap Group scoring at proficient and distinguished levels. See the example below.

DEMOGRAPHIC GROUP	READING 2009 STUDENT COUNT	READING 2009 PERCENT (PROFICIENT + DISTINGUISHED)		READING 2010 STUDENT COUNT	READING 2010 PERCENT (PROFICIENT + DISTINGUISHED)
Non-Duplicated Gap Group*	279	36.20		279	35.13
*African-American	163	34.97		154	25.97
*Hispanic	20	50.00		15	46.67
*Native American	0	0		0	0
*With Disability	66	12.12		52	19.23
*Free/Reduced-Price Meals	237	36.71		263	35.36
*Limited English Proficiency	19	21.05		26	3.85
Other Groups Report					
All Students	303	38.28		304	38.16
Male	175	32.00		165	31.52
Female	128	46.88		139	46.04
White	107	41.12		111	50.45
Asian	4			16	50.00
*Groups included in Gap					

Individual Gap Groups will not be lost in the new model: The Kentucky Department of Education recognizes the issue of potential masking of individual gap group scores even though all gap groups will be reported. To address this issue, a section has been added to another regulation (703 KAR 5:220, Overall Accountability Measure, School and District Recognition and Support) that requires the Kentucky Department of Education to identify all individual gap groups that perform below the average of all students by the second and third standard deviation.

All schools with gap groups underperforming in the third standard deviation (commonly called 3 Sigma) will face state consequences. Schools in the Distinguished, Proficient and Needs Improvement categories can be flagged for the state consequences for underperforming individual gap groups. The Kentucky Department of Education will use the 3 Sigma model to eliminate the masking of low-scoring groups and will conduct ongoing data analysis to determine if the model needs adjusting.

NEXT-GENERATION LEARNERS PROPOSED ACCOUNTABILITY MODEL

DRAFT FOR DISCUSSION

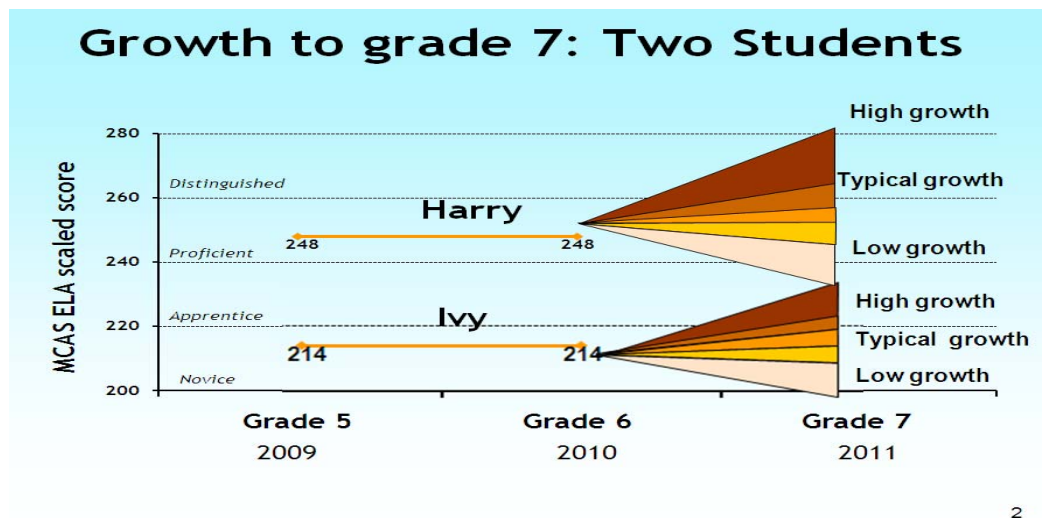
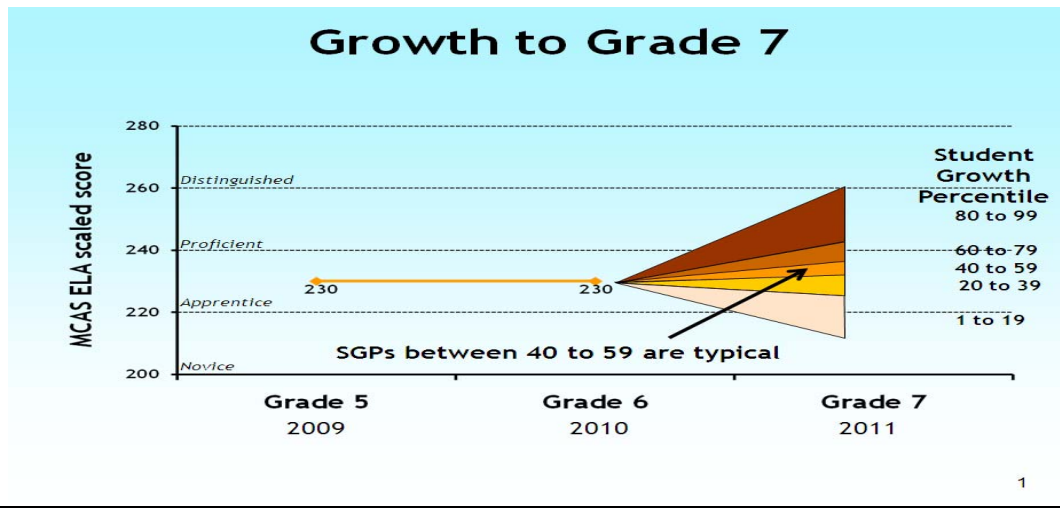
Revised based on input from Kentucky Board of Education, stakeholders and data simulations

Proposed Growth Calculation: Points are awarded for percentage of students growing at typical or high growth. Scale for growth would be determined at equal intervals. For elementary and middle schools, calculation is completed for reading and mathematics where annual testing occurs (grades 3-8). Schools receive one point for each percent of students that show typical or high growth.

At high school, the same model of awarding points for student performance along a scale was discussed. Points are awarded for percentage of students showing growth when comparing student performance on PLAN (grade 10) compared to ACT (grade 11). The PLAN and ACT composite scores in reading and mathematics are used for comparison.

The proposed growth calculation uses a Student Growth Percentile. It compares an individual student's score to the student's academic peers. Following are two growth samples modified from the Massachusetts Department of Education, where this method for measuring student growth is used.

GROWTH SAMPLES



NEXT-GENERATION LEARNERS PROPOSED ACCOUNTABILITY MODEL

DRAFT FOR DISCUSSION

Revised based on input from Kentucky Board of Education, stakeholders and data simulations

Proposed College/Career-Readiness Rate Calculation: A readiness percentage is calculated by dividing the number of high school graduates who have successfully met an indicator of readiness for college/career with the total number of graduates. The indicators of readiness include student performance on the ACT, completion of college placement tests or attainment of an industry-recognized career certificate. Kentucky provided a first look at the Readiness Rate in September 2010.

HIGH SCHOOL GRADUATES COLLEGE/CAREER READINESS PERCENTAGE								
				Indicators of Readiness*			Readiness Calculation Percentages	
				Number of Students Meeting Indicator <i>Each student is counted once.</i>				
Year	Code	School or District Name	Number of Graduates	CPE Systemwide Benchmarks on the ACT	College Placement Tests	Career Measures	Percent	2015 Improvement Goal**
2009	xxxxxx	School A	200	90	n/a	5	48%	75%
2010	xxxxxx	School A	300	100	n/a	30	43%	80%
2009	xxxxxx	School B	200	70	n/a	5	38%	70%
2010	xxxxxx	School B	200	25	n/a	5	15%	60%

*CPE Systemwide Benchmarks on the ACT indicator include students meeting the Kentucky Council on Postsecondary Education (CPE) Systemwide Benchmarks for Reading (20), English (18) and Mathematics (19) on any administration of the ACT. The College Placement Tests indicator includes students who missed one or more CPE Systemwide Benchmarks on the ACT but who passed a college placement test. College Placement Tests data will be phased in at a later date. Currently, the Career Measures indicator includes students who missed CPE Systemwide Benchmarks on the ACT or college placement tests, but received an industry-recognized career certificate. *The Kentucky Board of Education has endorsed the idea of additional career measures as the national definition of career readiness evolves.*

**In September 2010, a Readiness goal was established for schools, districts and the state to improve their 2010 Readiness percentage by at least 50 percent. The improvement goal was derived by subtracting the 2010 readiness percentage from the maximum of 100 percent readiness, then dividing by two. This value was then added to the 2010 percentage to establish a 50 percent improvement goal for 2015.

While reporting will continue to show an improvement goal, the percentage of students demonstrating readiness (i.e., Readiness Rate) will be included in Next-Generation Learners. In the table above, this is the value in the Percent column under the Readiness Calculation heading.

For the middle school level, college readiness is based on student performance on the EXPLORE assessment administered at Grade 8. The percent of students meeting the ACT-established benchmarks for EXPLORE in reading (15), English (13) and mathematics (17) will be reported. The

NEXT-GENERATION LEARNERS PROPOSED ACCOUNTABILITY MODEL

DRAFT FOR DISCUSSION

Revised based on input from Kentucky Board of Education, stakeholders and data simulations

percent of students meeting the benchmark in each content area is averaged to generate a middle school college readiness percentage.

Proposed Graduation Rate Point Calculation: A graduation rate for each school and district will be reported annually in Next-Generation Learners.

Additional reporting of graduation rates may occur to meet federal statutes and regulations.

Overall Score Reporting for Next-Generation Learners: The high school example below displays scores for each category of Next-Generation Learners. The Kentucky Board of Education approved that students enrolled for a full academic year (100 instructional days) shall be included in the calculations for Achievement, Gap, Individual Student Growth and Readiness for College or Career for a school and district. For Graduation Rate, students enrolled and students earning diplomas shall be included in the calculations.

The proposed weights (see page 3) for high school are equally distributed at 20 percent each for Achievement, Gap, Growth, College/Career Readiness and Graduation Rate.

Kentucky High School Sample

	Raw Score	School Weighted Score	School and District Classifications			
Achievement Points Earned	67.5	13.5	Distinguished			
Gap (Percent Proficient and Distinguished)	39%	7.8	Proficient			
Growth (Percent Typical or Higher)	49.50%	9.9	Needs Improvement			
College/Career Readiness (Percent of Students Meeting Indicators)	38%	7.6	Persistently Low Achieving			
Graduation Rate	83%	16.6				
Total	N/A	55.4				

Standard Setting

The standard-setting process will establish the goals and cut scores or point totals that determine school and district placement in one of four classifications (Distinguished, Proficient, Needs Improvement or Persistently Low-Achieving). The standard-setting process will occur after data is available from the first administration of the new state-required assessments outlined in Senate Bill 1.

NEXT-GENERATION LEARNERS PROPOSED ACCOUNTABILITY MODEL

DRAFT FOR DISCUSSION

Revised based on input from Kentucky Board of Education, stakeholders and data simulations

Assessments and Alignment to College Readiness

The capstone assessment for all Kentucky students is the ACT test given to juniors. The ACT provides an extremely strong research-based prediction of college readiness. This college-ready indicator plays a major part of Kentucky's College/Career Readiness indicator. The ACT PLAN test, given to all 10th-grade students in Kentucky, provides a direct connection from its scores to a predicted ACT score, thus linking early high school work to college readiness.

Kentucky will begin using the ACT Quality Core® End-of-Course (EOC) Assessments and writing on-demand tests in 2011-12, creating an additional connection between the score on the high school EOC tests and ACT. Each Quality Core® EOC Assessment provides predictions to either a PLAN or ACT score, thus making the entire high school system aligned to college readiness. Common Core Standards are reflected in ACT, the ACT PLAN and the Quality Core® End-of-Course Assessments.

The summative assessments in grades 3-8 are being developed based on Common Core Standards. Common Core Standards were written to have incrementally increasing levels of rigor and alignment with college readiness standards.

Kentucky has contracted with the National Center for Educational Achievement (NCEA), which will conduct a linking study between the ACT EXPLORE test and the grades 3-8 Kentucky tests. This study will provide Kentucky with a vertical connection from 3rd grade to college readiness. By using the linking study, Kentucky will be able to tell, as early as 3rd grade, if a student is on track to the college-ready benchmark on the 8th grade ACT EXPLORE, which connects to the 10th-grade PLAN, which connects to the ACT, which connects to college readiness. Kentucky's entire assessment system will be linked to college readiness. Kentucky's intent is use the study to set cut scores for state assessments at a level so that proficiency for school performance equates with on-track to college- and/or career-ready high school graduation. All students will be expected to meet the college-ready benchmarks.

Accountability

A new regulation, 703 KAR 5:220, Overall Accountability Measure, School and District Recognition and Support, has been presented to the Kentucky Board of Education. This regulation deals with the recognition and support to be generated due to the overall accountability model results that includes Next-Generation Learner, Next-Generation Instructional Programs and Support, and Next-Generation Professionals. Until the other components are completed, only the Next-Generation Learner component will be used to generate an overall score for accountability. The regulation requires the following:

- Identify the lowest performing (5 percent) of schools in Kentucky and require intensive turn-around options and support.
- Identify the lowest 20% of districts and schools (not including the lowest 5 percent) and require prescribed planning and communication, accreditation work, partnering with high achieving districts, specific use of resources, and KDE approval and guidance for their improvement process.
- As part of the model, diagnostic reviews will be conducted with the intent of assisting the schools and sharing with all schools the lessons learned.

NEXT-GENERATION LEARNERS PROPOSED ACCOUNTABILITY MODEL

DRAFT FOR DISCUSSION

Revised based on input from Kentucky Board of Education, stakeholders and data simulations

House Bill 176, passed in the 2010 session of the Kentucky General Assembly and codified as KRS 160.346, defines "persistently low-achieving school" and other terms; sets forth intervention options; specifies responsibilities of audit teams; specifies timelines for the commissioner of education to act upon audit teams' recommendations; and requires each persistently low-achieving school to engage in one of the established intervention options or other model recognized in the federal No Child Left Behind Act.

This statute and its accompanying regulation (703 KAR 5:180) provide the means by which activities and processes will be implemented in schools identified as "persistently low-achieving," based on their performance on state academic assessments. These mandates also complement 703 KAR 5:220 in the areas of identification and assistance.